



We make Indiana a cleaner, healthier place to live

Frank O'Bannon
Governor

John M. Hamilton
Commissioner

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.idem.org/idem

June 16, 1998

Mr. Roger Glendening
Milbank Manufacturing, Inc.
P.O. Box 754
Kokomo, IN 46903-0754

Re: Request for Additional Info., Application No. 80144
Milbank Manufacturing; Howard County

Dear Mr. Glendening:

This letter is in response to a Special Waste Certification Application for the disposal of wastewater treatment filter cake. Staff have reviewed your application and determined that additional information processes that generating the filter cake is needed. Please address the following.

- 1) Information with your application indicates Milbank runs both galvanized steel and aluminum parts. Please explain what exactly is being done to the surface of both of these types of parts as a result of your five stage wash process.
- 2) Do any industrial processes at Milbank involve the chemical conversion coating of aluminum?
- 3) Does Milbank have any electroplating processes on-site?
- 4) Stage five of Milbank's wash process involves the application of a non-chrome sealer. Does this seal place a coating on the aluminum parts? Please provide a list of ingredients found in the sealer along with their percent composition.

Please submit this information to Ms. Marcia Earl at the following address:

Attn: Ms. Marcia Earl
Indiana Department of Environmental Management
Office of Solid and Hazardous Waste Management
100 North Senate Avenue
Indianapolis, IN 46206-6015

No further action can be taken on your application until this information is received. If you have further questions concerning this matter, please contact me at 317/233-0999.

Sincerely,

Jeffrey A. Workman
Special Waste Section
Solid Waste Facilities Branch
Solid and Hazardous Waste Management

INFORMATION REQUESTED ITEM #1

GALVANIZED MATERIAL

ALL 5 STAGES ARE SPRAY APPLICATION

STAGE 1

GALVANIZED PARTS ARE WASHED WITH "LIQUID FERRO TERJ" (DUBOIS), AN ALKALINE CLEANER USED TO REMOVE ANY DIRT, SHAVINGS OR SOLUBLE OIL FROM THE SURFACE OF THE MATERIAL.

STAGE 2

GALVANIZED PARTS ARE RINSED WITH CITY WATER TO ELIMINATE ANY LIQUID FERRO TERJ THAT MAY HAVE CARRIED OVER FROM STAGE 1.

STAGE 3

GALVANIZED PARTS ARE WASHED WITH "SECURE LOW FOAM" (DUBOIS) WHICH IS A MILD ACIDIC SPRAY USED TO CLEAN AND PREPARE THE SURFACE FOR PAINTING.

STAGE 4

GALVANIZED PARTS ARE RINSED WITH CITY WATER TO ELIMINATE ANY SECURE LOW FOAM THAT MAY HAVE CARRIED OVER FROM STATE 3.

STAGE 5

GALVANIZED PARTS ARE RINSED WITH ICA-503 (DUBOIS) WHICH IS A FINAL RINSE ADDITIVE USED TO PROMOTE BETTER ADHESION FOR THE POWDER PAINT. (SEE ATTACHED MSDS SHEET)

INFORMATION REQUESTED ITEM #1

ALUMINUM MATERIAL

ALL 5 STAGES ARE SPRAY APPLICATION

STAGE 1

ALUMINUM PARTS ARE WASHED WITH "LIQUID FERRO TERJ" (DUBOIS), AN ALKALINE CLEANER USED TO REMOVE ANY DIRT, SHAVINGS OR SOLUBLE OIL FROM THE SURFACE OF THE MATERIAL.

STAGE 2

ALUMINUM PARTS ARE RINSED WITH CITY WATER TO ELIMINATE ANY LIQUID FERRO TERJ THAT MAY HAVE CARRIED OVER FROM STAGE 1.

STAGE 3

ALUMINUM PARTS ARE WASHED WITH "SECURE LOW FOAM" (DUBOIS) WHICH IS A MILD ACIDIC SPRAY USED TO CLEAN AND PREPARE THE SURFACE FOR PAINTING.

STAGE 4

ALUMINUM PARTS ARE RINSED WITH CITY WATER TO ELIMINATE ANY SECURE LOW FOAM THAT MAY HAVE CARRIED OVER FROM STATE 3.

STAGE 5

ALUMINUM PARTS ARE RINSED WITH ICA-503 (DUBOIS) WHICH IS A FINAL RINSE ADDITIVE USED TO PROMOTE BETTER ADHESION FOR THE POWDER PAINT. (SEE ATTACHED MSDS SHEET)

INFORMATION REQUESTED ITEM #2

NO INDUSTRIAL PROCESS AT MILBANK INVOLVES THE
CHEMICAL CONVERSION COATING OF ALUMINUM.

INFORMATION REQUESTED ITEM #3

MILBANK DOES NOT HAVE ANY ELECTROPLATING
PROCESSES.

INFORMATION REQUESTED ITEM #4

OUR IC-503 (NON CHROM SEALER) DOES NOT PLACE A
COATING ON ALUMINUM PARTS. ATTACHED ARE THE MSDS
SHEETS.

USE: TANK #5

From: DiversyLeuer at 513 466-0835

66-18-93 04:17 pm B 003 04 04

MATERIAL SAFETY DATA SHEET

Page 1 of 1
Revised 6/30/93
Replaces (None)
Printed 6/18/93

ICA-503

MSDS ID: 02442

I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ICA-503
PRODUCT DESCRIPTOR: FINAL RINSE ADDITIVE
MANUFACTURER: DIVERSY CHEMICALS
255 E. 5TH ST.
CINCINNATI, OH 45202
EMERGENCY PHONE NUMBERS: MEDICAL (COLLECT): (303) 592-1024
CHEMTREC: (800) 424-9300
DUBOIS (24 HOURS): (800) 543-4906

II. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME (CAS NUMBER)	% EXPOSURE LIMITS	UNITS
ALUMINIUM CHLOROHYDROLYTE (SOLUBLE SALTS) (1327-41-9)	50 TIV 2	MG/M3

III. HAZARDS IDENTIFICATION

ROUTES OF ENTRY: INHALATION: NO
SKIN: NO
INGESTION: YES
SIGNS AND SYMPTOMS OF EXPOSURE:
ACUTE: MAY CAUSE EYE IRRITATION
CHRONIC: SAME AS ACUTE
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:
SENSITIVE SKIN

IV. FIRST AID MEASURES

EYES: FLUSH THOROUGHLY WITH FRESH WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION.
SKIN: FLUSH WITH FRESH WATER, WASH WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHES AND SHOES.
INGESTION: GIVE WATER. DO NOT INDUCE VOMITING. GET MEDICAL ATTENTION.
INHALATION: N/A IN NORMAL OPERATION.

V. FIRE FIGHTING MEASURES

FLASH POINT: N/A	DEG F	FLAME EXTENSION: N/A	IN.
FLAMMABLE LIMITS IN AIR BY VOLUME:		LEL: N/A	UEL: N/A
UNUSUAL FIRE OR EXPLOSION HAZARDS:		NONE KNOWN	
EXTINGUISHING MEDIA:		CO2, DRY CHEMICAL, FOAM, WATER	
FIRE FIGHTING INSTRUCTIONS:		MAY DECOMPOSE TO HYDROGEN CHLORIDE IN FIRE. IF FUMES ARE PRESENT, WEAR SELF-CONTAINED BREATHING APPARATUS.	

-From: DiversyLever at 513-267-6035

06-18-93 04:18 pm 15 884 01 905

MATERIAL SAFETY DATA SHEET

ICA-503

Page 2 of 3
Revised 6/20/95
Replaces (None)
Printed 6/18/95

MSDS ID: 02442

VI. ACCIDENTAL RELEASE MEASURES

IF MATERIAL IS RELEASED OR SPILLED: FLUSH SMALL AMOUNTS TO DRAIN. COLLECT AND RETURN LARGE SPILS TO CONTAINER.

VII. HANDLING AND STORAGE

HANDLING AND STORAGE PRECAUTIONS: DO NOT PRESSURIZE CONTAINER TO EMPTY. IF FROZEN, THAW AND MIX TO MAKE USABLE.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE/FACE PROTECTION: SAFETY GLASSES
PROTECTIVE GLOVES: NON-ABSORBENT
RESPIRATORY PROTECTION: NONE
OTHER PROTECTIVE CLOTHING/EQUIPMENT: NONE
EXPOSURE GUIDELINES: SEE SECTION II FOR DETAILED INFORMATION.

IX. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT (°F): 220 SPECIFIC GRAVITY: 1.3400
VOLATILE BY VOLUME: 50 SOLUBILITY IN WATER: 100
VAPOR PRESSURE (MMHG): N/A AT
APPEARANCE AND ODOR: CLEAR TO SLIGHTLY HAZY LIQUID: NO ODOR

X. STABILITY AND REACTIVITY

CHEMICAL STABILITY: STABLE
INCOMPATIBILITY WITH OTHER MATERIALS: PRODUCT WILL SLOWLY CORRODE IRON, BRASS, COPPER, ALUMINUM, MILD STEEL.
HAZARDOUS DECOMPOSITION PRODUCTS: HCl
HAZARDOUS POLYMERIZATION: NONE KNOWN

XI. TOXICOLOGICAL INFORMATION

NO DATA AVAILABLE

XII. ECOLOGICAL INFORMATION

NO DATA AVAILABLE

XIII. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: USE UNTIL LESS THAN ONE INCH REMAINS IN CONTAINER. TRIPLE RINSE CONTAINER WITH WATER, ADD TO OPERATION. REMOVE OR DEFEND CONTAINER LABEL BEFORE SELLING OR DISPOSAL. CONTAINS NO PHOSPHATES.

From: DiversyLever at 513-762-6835

06-18-93 04:18 pm

005 of 0%

MATERIAL SAFETY DATA SHEET

ICA-503

Page 3 of 3
Revised 6/30/93
Replaces (None)
Printed 6/18/93

MSDS ID: 07442

XIV. TRANSPORT INFORMATION

HAZARDOUS MATERIALS DESCRIPTION/PROPER SHIPPING NAME:

D.O.T. CLASS: COMPOUNDS, WATER CLARIFYING, LIQUID, N.O.I.

XV. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

CERCLA/EPCRA: SECTION 313 TOXIC CHEMICALS:

NONE

LISTED CARCINOGEN: NONE

NTP: NO

IARC: NO

OSHA: NO

HMIS RATINGS: HEALTH: 1

FIRE: 0

REACTIVITY: 0

PERSONAL PROTECTIVE EQUIPMENT: B

STATE RIGHT-TO-KNOW INFORMATION:

ALUMINUM CHLOROHYDRATE - CAS # 1377-41-9

WATER - CAS # 7732-18-5.

XVI. OTHER INFORMATION

THE INFORMATION IN THIS MSDS RELATES TO THIS SPECIFIC MATERIAL. IT
MAY NOT BE VALID FOR THIS MATERIAL IF USED OTHER THAN AS RECOMMENDED
BY DIVERSY CHEMICALS OR IN COMBINATION WITH OTHER MATERIALS. IT IS THE
USER'S RESPONSIBILITY TO EVALUATE THE APPLICABILITY OF THIS INFORMAT-
TION FOR HIS PARTICULAR CONDITIONS OF STORAGE, HANDLING AND USE.



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live

Frank O'Bannon
Governor

John M. Hamilton
Commissioner

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.idem.org

July 7, 1999

Mr. Robert Choate
Oxford Automotive, Inc.
1250 Stephenson Hwy.
Troy, MI 48083

Dear Mr. Choate:

Re: Special Waste Certification
#60033, 40010, 60281, and 60287
Oxford Suspension, Inc.
Hamilton, Steuben County

This is in response to your letter dated June 9, 1998, and acknowledges the facility name change from Eaton Corporation to Oxford Suspension Incorporated. Your letter explaining this transaction will be placed in our files for future reference.

The Special Waste Certifications 60033 expiration February 1, 2001, 40010 expiration January 30, 1999, 60281 and 60287 expiration May 13, 2001, remain in effect until said expiration dates as long as all processes and raw materials remain the same. Amendments to the above mentioned certifications to reflect the facility name change are enclosed.

Thank you for your notification of this change. If you have any questions pertaining to this matter, please contact Marcia Earl of my staff at 317/233-2823.

Sincerely,

Rosemary Cantwell, Chief
Special Waste Section
Solid Waste Compliance Branch
Solid and Hazardous Waste Management

enclosure

cc: Mel Simpson: Oxford Suspension, Inc., 7825 South Homestead Dr., Hamilton, IN
46742-0070

SPECIAL WASTE CERTIFICATION APPLICATION

Cashier, Room N1324
 Indiana Department of Environment Management
 100 N. Senate Avenue
 P.O. Box 7060
 Indianapolis, Indiana 46206-7060
 Telephone: 317/232-3111

FOR OFFICE USE ONLY

Reviewer

Application No.

Workman

80144

1. Generator Fee

Generator Fee: \$250. per application

PAID BY:

4288
(Check # or Money Order #)

2. Generator Information

Generator Facility Location			Generator Mailing Address		
Name	Nulbank Mfg		Name	Nulbank Mfg	
Address	1400 E. Hawthorn		Address	P.O. Box 754	
	Kokomo IN 46901			Kokomo IN 46903-0754	
(City)	(State)	(Zip)	(City)	(State)	(Zip)
County	Howard		County	Howard	
Technical Contact and Telephone #	765-432-5694 Roger Lindberg		Technical Contact and Telephone #	Same	
EPA Identification Number:	IND 006052930				

3. Contractor Information

Applicant (if other than generator)			Proposed Disposal Site		
Name	Wm G. Central Indiana		Name	Oak Ridge Opp No. 9-2	
Address	740 W. Ohio P.O. Box 446		Address	P.O. Box 1038	
	Kokomo IN 46903-0446			Prosserport IN 46947	
(City)	(State)	(Zip)	(City)	(State)	(Zip)
Technical Contact and Telephone #	765-459-8112 BO Frederickson		Technical Contact and Telephone #	Rick Goings 219-722-5711	
<input checked="" type="checkbox"/> Check box if you want a copy of certification					

4. Regulatory Issues

Are the waste(s) related to any of the following occurring at your facility: (please check)

CERCLIS Clean-up ☐Hazardous/Solid Waste Enforcement ☐Corrective Action ☐Air/Water Issues ☐No Issues ☐

Other _____

Special Waste Certification Application (page 2 of 4)

List below in section 5 the waste stream for which certification is being requested under this application. If a number of similar waste streams are being combined for certification purposes (see instructions), list all the waste streams included within this combination. Separate applications must be submitted for each waste stream or each combination of waste streams requiring certification.

5. Waste(s) Information	
Waste(s) Name(s)	Previous Certification No. (if applicable)
1.) <u>Waste water treatment filter cake</u>	
2.)	
3.)	
4.)	
5.)	
6.)	
7.)	
8.)	
9.)	
10.)	

Anticipated annual disposal quantity: Unknown at this time 32 yds

Check box if this is a one-time only disposal ☐

Type of disposal containers(s) to be used: Roll off

6. Sampling and Laboratory Information	
Laboratory	Sample Collector
Name <u>Wm</u>	Name <u>Michael Nye</u>
Address <u>2100 Clearwater Dr</u>	Address <u>1400 E. Hawes</u>
<u>Gomua IN 60134</u>	<u>Spokane WA 99201</u>
(City) (State) (Zip)	(City) (State) (Zip)
Technical Contact and Telephone # <u>John Stacker 630-208-3100</u>	Telephone # <u>765-452-5694</u>

Special Waste Certification Application (page 3 of 4)

If certification is being requested for a combination of similar waste streams under this application, complete this page for each waste stream included in that combination.

7. Waste Characterization

Is the waste a listed hazardous waste as defined in 329 IAC 3.1? Yes _____ No X

Does this waste contain PCB's or PCB items as defined in 329 IAC 4? Yes _____ No X

Physical Characteristics: (attach MSD Sheets if Available)

Physical state: Solid

Percent solids 100 %

Fire, explosion, or spontaneous ignition hazard? Yes _____ No X

Does this waste contain: Free liquids? NO Asbestos? NO Solvents? _____

Odor? None X Mild _____ Strong _____ Describe: _____

Analytical Information

Sampling: Date sample was collected: 4-29-98 Sample type: grab _____ composite X

Was a sampling plan used? Yes _____ No X If so, provide a copy if requested (see instructions).

Is the sample representative of the waste? Yn5

Results: attach original laboratory documentation i.e. TCLP metal, pesticide, organic, corrosivity, ignitability, reactivity, or other. (Provide QA/QC upon request).

8. Process Description (attach additional pages if necessary)

9. Generator Signature

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation. I further certify that I am authorized to submit this information". (329 IAC 10-8-6 (c))



Signature

ROGER D. GLENDENING

(type or print name)

5-13-98

Date

PRODUCTION MGR. / PLANT SUPT.

Title

Sample Id: 200099440

Waste Profile No: MILBANK

Lab Asystant No:

FINGERPRINT

Odor Incidental
Layering
Pct Free Liquids
L1: Color
L1: Physical State
L1: Pct Of Sample
L1: Gen Description
L1: Further Descrip
pH - Meter
pH Method
Paint Filter
Paint Filter Method

Result

NONE
SINGLE PHASE
0
BRN
SOLID
100
WHOLE
SLUDGE
9.94
10% SOLUTION
PASS
ACTUAL

Date Entered

05/02/98
05/02/98
05/02/98
05/02/98
05/02/98
05/02/98
05/02/98
05/02/98
05/02/98
05/02/98
05/02/98
05/02/98

Analyst

MRW
MRW
MRW
MRW
MRW
MRW
MRW
MRW
MRW
MRW
MRW
MRW

COMMENTS:

No FINGERPRINT Comments

WET CHEMISTRY

Total Residue @ 105°C
Ash Content, On Ignition
Cyanides, As CN Total
Reactive Sulfide
Flash Point - Open Cup

Result

>99
29.9
< 0.5
<50
>175

Unit

percent
percent
ppm
ppm
fahrenheit

Date Entered

05/04/98
05/04/98
05/05/98
05/05/98
05/02/98

Analyst

JH
JH
AN
AN
MRW

COMMENTS:

No WET CHEMISTRY Comments

SPECTROSCOPY

Arsenic - TCLP
Barium - TCLP
Cadmium - TCLP
Chromium - TCLP
Copper - TCLP
Lead - TCLP
Mercury - TCLP
Nickel - TCLP
Selenium - TCLP
Silver - TCLP
Zinc - TCLP
Initial pH - TCLP
Final pH - TCLP

Result

<0.11
0.23
<0.004
0.06
4.5
<0.10
<0.00014
0.06
<0.25
0.02
89.8
10.05
5.26

Unit

mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L

Date Entered

05/05/98
05/05/98
05/05/98
05/05/98
05/05/98
05/05/98
05/05/98
05/05/98
05/06/98
05/05/98
05/06/98
05/01/98
05/02/98

Analyst

MTS
MTS
MTS
MTS
MTS
MTS
JG
MTS
MTS
MTS
MTS
JH
MRW

Start Date/Time - TCLP
Stop Date/Time - TCLP

5-1-98/5:00PM
05-02-98/9AM

05/01/98
05/02/98

JH
MRW

COMMENTS:

BATCH ID TCLP HG 050498A3HG
ICP TCLP BATCH ID - 9805ICP202

SOLID PCBS - LOW LIMIT

Total Arochlors is

Result

< 2

Unit

ppm

Date Entered

05/06/98

Analyst

TB

Analytical Report

WMX Technology Center

2100 Cleanwater Drive - Geneva, Illinois 60134-3310

Phone: 630 208-3100 - Fax: 630 208-1175

Report Date:	May 7, 1998
WMX TC ID:	200099440
Date Sampled:	29-APR-98
Date Logged:	01-MAY-98
Client Profile Number:	MILBANK
Source:	MIN
Client Name:	MILBANK MFG
Client Location:	
Sample Name:	WWT FILTER CAKE
Client Number:	

CERTIFICATION: All analysis was completed under my direction following the applicable regulatory or company method unless otherwise annotated.

Approved: _____

Karl Hacker

**SOLID PCBS - LOW LIMIT
(continued):****Result****Unit****Date Entered****Analyst****COMMENTS:**

gd7e41

TC SEMI**Result****Unit****Date Entered****Analyst**

Cresol Total	< 100	mg/L	05/05/98	
O-Cresol	< 100	mg/L	05/05/98	
M-Cresol + P-Cresol	< 100	mg/L	05/05/98	
1,4-Dichlorobenzene	< 3.25	mg/L	05/05/98	
2,4-Dinitrotoluene	< 0.065	mg/L	05/05/98	
Hexachlorobenzene	< 0.065	mg/L	05/05/98	
Hexachloro-1,3-Butadiene	< 0.25	mg/L	05/05/98	
Hexachloroethane	< 1.5	mg/L	05/05/98	
Nitrobenzene	< 1	mg/L	05/05/98	
Pentachlorophenol	< 50	mg/L	05/05/98	
Pyridine	< 2.5	mg/L	05/05/98	
2,4,5-Trichlorophenol	< 200	mg/L	05/05/98	
2,4,6-Trichlorophenol	< 1	mg/L	05/05/98	

COMMENTS:

v5v20

TC VOA**Result****Unit****Date Entered****Analyst**

Benzene	< 0.25	mg/L	05/06/98	
Carbon Tetrachloride	< 0.25	mg/L	05/06/98	
Chlorobenzene	< 50	mg/L	05/06/98	
Chloroform	< 3	mg/L	05/06/98	
1,2-Dichloroethane	< 0.25	mg/L	05/06/98	
1,1-Dichloroethylene	< 0.35	mg/L	05/06/98	
Methyl Ethyl Ketone (Mek)	< 100	mg/L	05/06/98	
Tetrachloroethylene	< 0.35	mg/L	05/06/98	
Trichloroethylene	< 0.25	mg/L	05/06/98	
Vinyl Chloride	< 0.1	mg/L	05/06/98	

COMMENTS:

pja19

ZHE - SAMPLE PREP**Result****Unit****Date Entered****Analyst**

Complete Date/Time- ZHE	05-05-98/8:00A	none	05/04/98	SW
Starting Date/Time- ZHE	05-04-98/6:00P	none	05/04/98	SW

COMMENTS:

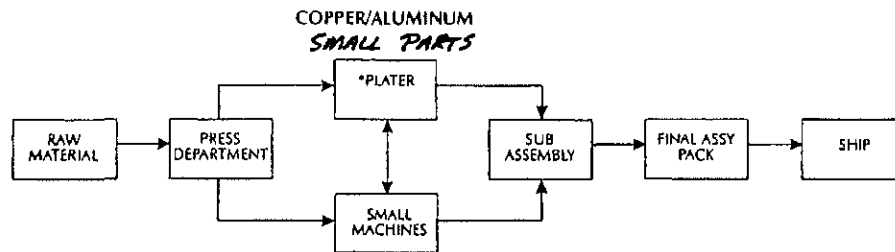
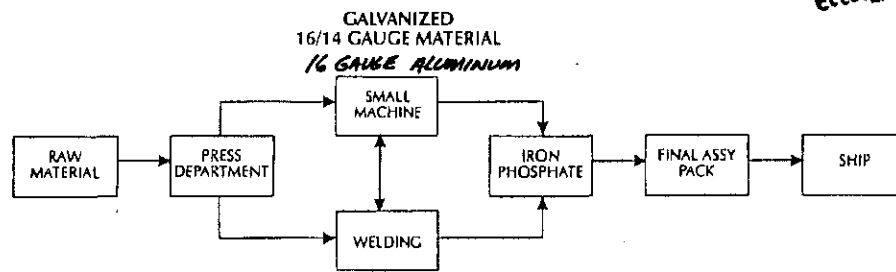
No ZHE - SAMPLE PREP Comments

WM Technology Center, Inc.
2100 Cleanwater Drive, Geneva, Illinois 60134
Client Services: (630) 208-3100 Fax: (630) 208-1175

LIMS ID #:

[illegible]

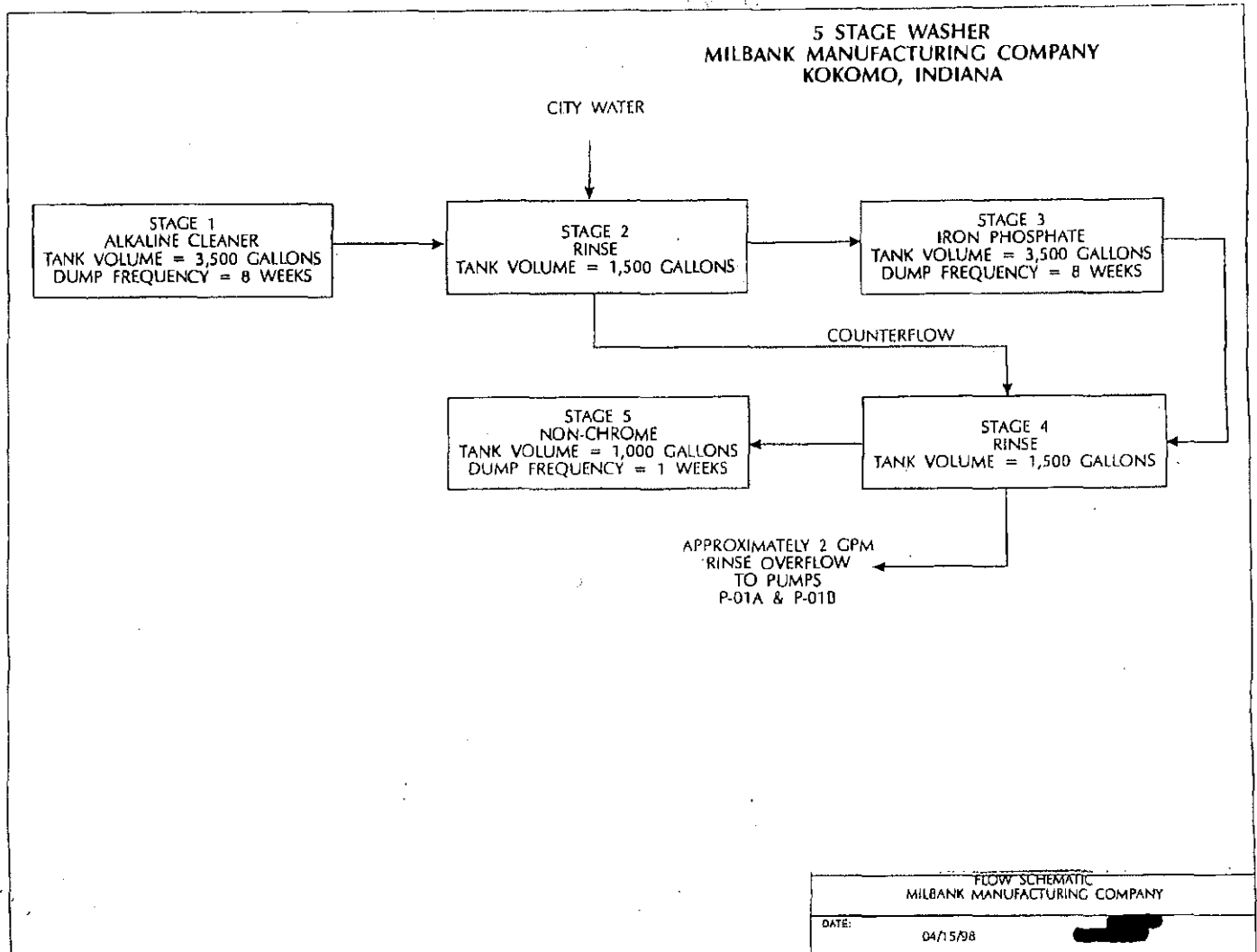
ELECTRIC MOTOR ENCLOSURE



* PLATING WILL BE BY OFF-SITE SOURCE.

MATERIAL FLOW DIAGRAM
MILBANK MANUFACTURING COMPANY

DATE: 04/15/98



ICA-503

Final Rinse Additive

Nonchrome final seal

Patented technology #5128211

Enhances corrosion resistance after painting

Easily automated for effective control

General Description:

ICA-503 rinse additive is a nonchromated liquid sealer used after phosphatizing. It is formulated for use in either spray washers or immersion tank systems with excellent drying capabilities.

Benefits:

ICA-503 nonchromated final rinse additive provides a sealing action over iron phosphate that improves paint adhesion and extends resistance of painted surfaces to premature corrosion.

Typical Properties:

Appearance	Clear Liquid
Density @ 78° F	11.18 lb/gallon
pH of Concentrate	3.6+/-0.2
pH of 1% solution	4.8+/-0.2

Using Procedures:

ICA-503 is designed to be used at very low concentrations. It has been used as a final rinse pH adjuster. The pH of the final rinse tank should be kept between 5.0-6.0. It does not take very much ICA-503 to lower the pH of fresh final rinse tank. Add small amounts while mixing until the desired pH is reached. For best control use an ACIDTROL or other pH control device to maintain the tank pH between 5.0-6.0. Exact feed rate of ICA-503 cannot accurately be determined due to the inconsistency of various water supplies. Therefore this will have to be determined as used in the account.

Other usage recommendations should be specifically covered by the APPLICATIONS ENGINEERING DEPARTMENT.

Tank life will depend on carry over from previous tanks and work load. Generally, a 500 gallon tank should be dumped once a week. A 1,000 gallon tank should be dumped every two weeks. Larger tank life should be determined by the account and the servicing DuBois representative.

DIVERSEY CORP.
12025 TECH CENTER DRIVE
LIVONIA, MICHIGAN 48150
PREPARED BY: M. ANTOSIA
ON 04/02/91

EMERGENCY PHONE NO.

313-458-5000

REFERENCE

ABBREVIATIONS		C-CEILING, MP-MAXIMUM PEAK, N/A-NOT APPLICABLE, N/K-NOT KNOWN, P-POTENTIAL, PEL-PERMISSIBLE EXPOSURE LIMIT, PM-PENSKY MARTENS, S-SKIN, ST-SHORT TERM, TLV-THRESHOLD LIMIT VALUE, TWA-TIME WEIGHTED AVERAGE.	
SECTION 1 IDENTITY	COMMON NAME USED ON LABEL	ICA-503	CODE 02442
SECTION 2 HAZARDOUS INGREDIENTS	PRINCIPAL HAZARDOUS COMPONENT(S) CHEMICAL & COMMON NAME	%	EXPOSURE LIMITS (TWA 8 HOUR UNLESS OTHERWISE SPECIFIED) UNITS
	NONE		
SECTION 3 PHYSICAL & CHEMICAL CHARACTERISTICS	APPEARANCE & COLOR	N/A	
	FLASH POINT	N/A	
	EXTINGUISHING MEDIA	CO ₂ , DRY CHEMICAL, FOAM, WATER	
	SPECIAL PROCEDURES	MAY DECOMPOSE TO HYDROGEN CHLORIDE IN A FIRE. IF FUMES ARE PRESENT, WEAR SELF CONTAINED BREATHING APPARATUS.	
SECTION 4 HAZARDS	UNUSUAL FIRE AND EXPLOSION HAZARDS	NONE	
	STABILITY	POLYMERIZATION NONE KNOWN	
	INCOMPATIBLE WITH	PRODUCT WILL SLOWLY CORRODE IRON, BRASS, COPPER, ALUMINUM, MILD STEEL.	
	DECOMPOSITION PRODUCTS	HCl	
SECTION 5 HEALTH HAZARDS	PRIMARY ROUTES OF ENTRY	INHALATION NO SKIN NO INGESTION YES	
	SIGNS	1. ACUTE MAY CAUSE EYE IRRITATION	
	AND		
	SYMPTOMS	2. CHRONIC SAME AS ACUTE	
	OF		
	OVEREXPOSURE		
	MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE	SENSITIVE SKIN	
	LISTED CARCINOGEN	NONE	
	EMERGENCY AND FIRST AID PROCEDURES		
	1. INHALATION	N/A IN NORMAL OPERATION.	
	2. EYES	FLUSH THOROUGHLY WITH FRESH WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION.	
	3. SKIN	FLUSH WITH FRESH WATER. WASH WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHES AND SHOES.	
	4. INGESTION	GIVE MILK OR WATER. DO NOT INDUCE VOMITING. GET MEDICAL ATTENTION.	
SECTION 6 PROTECTION	RESPIRATORY PROTECTION	NONE	
	VENTILATION MECHANICAL	NONE	
	PROTECTIVE GLOVES	NON-ABSORBENT	
	EYE PROTECTION	SAFETY GLASSES	
	OTHER PROTECTIVE CLOTHING/EQUIPMENT	NONE	
SECTION 7 SPECIAL PRECAUTIONS	HANDLING AND STORAGE PRECAUTIONS	DO NOT PRESSURIZE CONTAINER TO EMPTY. IF FROZEN, THAW AND MIX TO MAKE USABLE.	
	OTHER PRECAUTIONS	D.O.T. CLASS: NOT REGULATED.	
	IF MATERIAL IS RELEASED/SPILLED	FLUSH SMALL AMOUNTS TO DRAIN. COLLECT AND RETURN LARGE SPILLS TO CONTAINER.	
SECTION 8 WASTE DISPOSAL METHODS	WASTE DISPOSAL METHODS	USE UNTIL LESS THAN ONE INCH REMAINS IN CONTAINER. TRIPLE RINSE CONTAINER WITH WATER. ADD TO OPERATION. REMOVE OR DEFACE CONTAINER LABEL BEFORE SELLING OR DISPOSAL. CONTAINS NO PHOSPHATES.	
SECTION 9 HMIS RATING	HEALTH	1	FLAMMABILITY 0
	REACTIVITY	0	PERSONAL PROTECTION 0
	NONE		
SECTION 10 STATE OF	ALUMINUM CHLOROHYDRATE- CAS # 1327-41-9		